

What is claimed is:

- 1) A framework for creating a search system of network resources, comprising:
  - a) a first tier defining sources/resources API; and
  - b) a second tier providing specific implementations of the sources/resources API.
- 2) A framework as in Claim 1, wherein the first tier includes a tree of accessible/searchable objects built of NetResource types.
- 3) A framework as in Claim 2, wherein the tree of accessible/searchable objects built of NetResource types includes at least one virtual NetResource and a plurality of non-virtual NetResources, wherein said at least one virtual NetResource organizes said plurality of non-virtual NetResources into groups and sub-groups.
- 4) A framework as in Claim 1, wherein the first tier includes manager classes.
- 5) A framework as in claim 4, wherein the manager classes are selected from the group consisting of download manager, scan manager, and properties manager.
- 6) A framework as in Claim 1, wherein the first tier includes resource handles.
- 7) A framework as in Claim 1, wherein the first tier includes threading classes.

- 8) A framework for creating search systems, comprising an abstraction layer to provide a user with a common interface to heterogeneous network objects, wherein the abstraction layer includes:
- a) source/resource API defined through at least one virtual NetResource class,
  - 5 b) a tree of accessible/searchable objects built of NetResource types,
  - c) at least one manager class,
  - d) at least one resource handle, and
  - e) at least one thread class.
- 10 9) A search system utilizing an abstraction layer to handle heterogeneous network resources and heterogeneous access methodologies, comprising:
- a) a framework incorporating self-contained modules containing derived NetResource types, and
  - b) means for deploying and combining said modules.
- 15 10) A framework for creating search systems of network access methodologies, comprising:
- a) a first tier defining sources/resources API; and
  - b) a second tier providing specific implementations of the sources/resources API.
- 20 11) A framework as in Claim 10, wherein the first tier includes a tree of accessible/searchable objects built of NetResource types.

12) A framework as in Claim 10, wherein the first tier includes manager classes.

13) A framework as in claim 12, wherein the manager classes are selected from the group consisting of download manager, scan manager, and properties manager.

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14) A framework as in Claim 10, wherein the first tier includes resource handles.

15) A framework as in Claim 10, wherein the first tier includes threading classes.

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16) A search system comprising a tree of accessible/searchable objects built of NetResource types, including at least one NetResource subtype.

17) A search system as in Claim 16, wherein said at least one NetResource subtype includes at least one of a virtual NetResource, a resource NetResource, a container NetResource, and a service NetResource.

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18) A framework for creating search systems with NetResources organized in a tree structure, comprising:

a) a first Virtual NetResource serving as a root, and

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b) at least one other virtual net resource, wherein said at least one other virtual net resource branches from said first Virtual NetResource.

19) A method for scanning a plurality of container NetResources, comprising  
initiating a call to a common API such that said common API enables a scanning  
procedure specific to a particular container NetResource.

5      20) A method for searching container NetResources, comprising initiating a call to a  
common API such that said common API enables a searching procedure specific  
to a particular container NetResource.